

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 2, 16, 32, 34-38 and 45-48 are pending. Applicants have canceled the non-elected claims without prejudice to future prosecution of that subject matter.

The Examiner is respectfully requested to consider the Information Disclosure Statement filed on July 28, 2004 and to return an initialed copy of the Form PTO-1449 per M.P.E.P. § 609.

A typographical error on page 47 of the present English-language specification is corrected. No new matter is added because this error occurred in translating the PCT application. Comparison to page 45 of the original Japanese-language specification filed during the international phase establishes the correct strain designation.

Correction of Figure 2 was required by the Examiner. Attached is a marked-up copy of Figure 2B showing the corrections in red. Approval of the corrections by the Examiner is requested. Upon approval of the corrections, entry of the formal drawings submitted herewith is also requested.

35 U.S.C. 101 –Utility

Claim 35 was rejected under Section 101 because they are allegedly "directed to non-statutory matter." Applicants traverse because the Examiner's suggestion to amend the claim has been adopted. Claims 36-37 are amended to clarify that the recited cells are transformed with the DNA to obtain the host cell.

Withdrawal of the Section 101 rejection is requested.

35 U.S.C. 112 – Definiteness

Claims 1-2, 16, 31-38 and 44-48 were rejected under Section 112, second paragraph, as being allegedly "indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Applicants traverse because the Examiner's suggestion for clarifying the claims by substituting "represented by" with --of-- has been adopted.

Applicants request withdrawal of the Section 112, second paragraph, rejection because the pending claims are clear and definite.

35 U.S.C. 102 – Novelty

A claim is anticipated only if each and every limitation as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is claimed. See *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claims 1-2, 34-36 and 44 were rejected under Section 102(b) as allegedly anticipated by Gewain et al. (U.S. Patent 5,262,474). Applicants traverse.

Gewain et al. (the '474 patent) describe cloning of a 110 kb gene cluster from *Streptomyces avermitilis*. The '474 patent does not, however, teach or suggest a DNA consisting of a nucleotide sequence of nucleotide Nos. 1-11916 of SEQ ID NO:1 or a DNA encoding a polypeptide comprising an amino acid sequence wherein His residue at position 3037 is substituted by an amino acid other than His and Ala residue at position 3038 is substituted by an amino acid other than Ala in the amino acid sequence of SEQ ID NO:3.

Therefore the '474 patent does not anticipate the claimed invention because it does not disclose all limitations of independent claim 2. Moreover, claims 34-36 which depend from independent claim 2 are also not anticipated by the reference because the limitations of claim 2 are incorporated in claims depending therefrom. See *In re McCarn*, 101 USPQ 411, 413 (C.C.P.A. 1954).

Withdrawal of the Section 102 rejection is requested because all limitations of the claimed invention are not disclosed by the cited reference.

35 U.S.C. 103 – Nonobviousness

Claims 1-2, 34-37 and 44 were rejected under Section 102(b) as allegedly anticipated by or, in the alternative, under Section 103(a) as allegedly obvious over Gewain et al. (U.S. Patent 5,262,474). Applicants traverse.

As discussed above, Gewain et al. (the '474 patent) do not teach or suggest any specific DNA sequence of the avermectin aglycon synthase gene. Therefore, a person skilled in the art could not have easily determined the complete DNA sequence of the avermectin aglycon synthase gene consisting of the nucleotide sequence of nucleotide Nos. 1-11916 of SEQ ID NO:1 or the amino acid sequence encoded by that DNA based on the disclosure of the '474 patent. Also, it would have been difficult using that DNA for such a skilled person to obtain the vector, the host cell, or the recombinant avermectin aglycon synthase.

Withdrawal of the Section 102 or 103 rejection is requested because the claimed invention is not anticipated or would not have been obvious to a person of ordinary skill in the art at the time it was made.

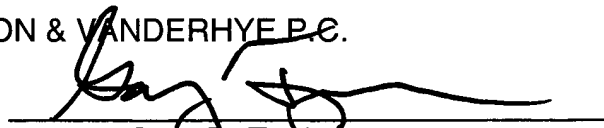
Conclusion

Having fully responded to all of the pending objections and rejections contained in this Office Action, Applicants submit that the claims are in condition for allowance and earnestly solicit an early Notice to that effect. The Examiner is invited to contact the undersigned if any further information is required.

Respectfully submitted,

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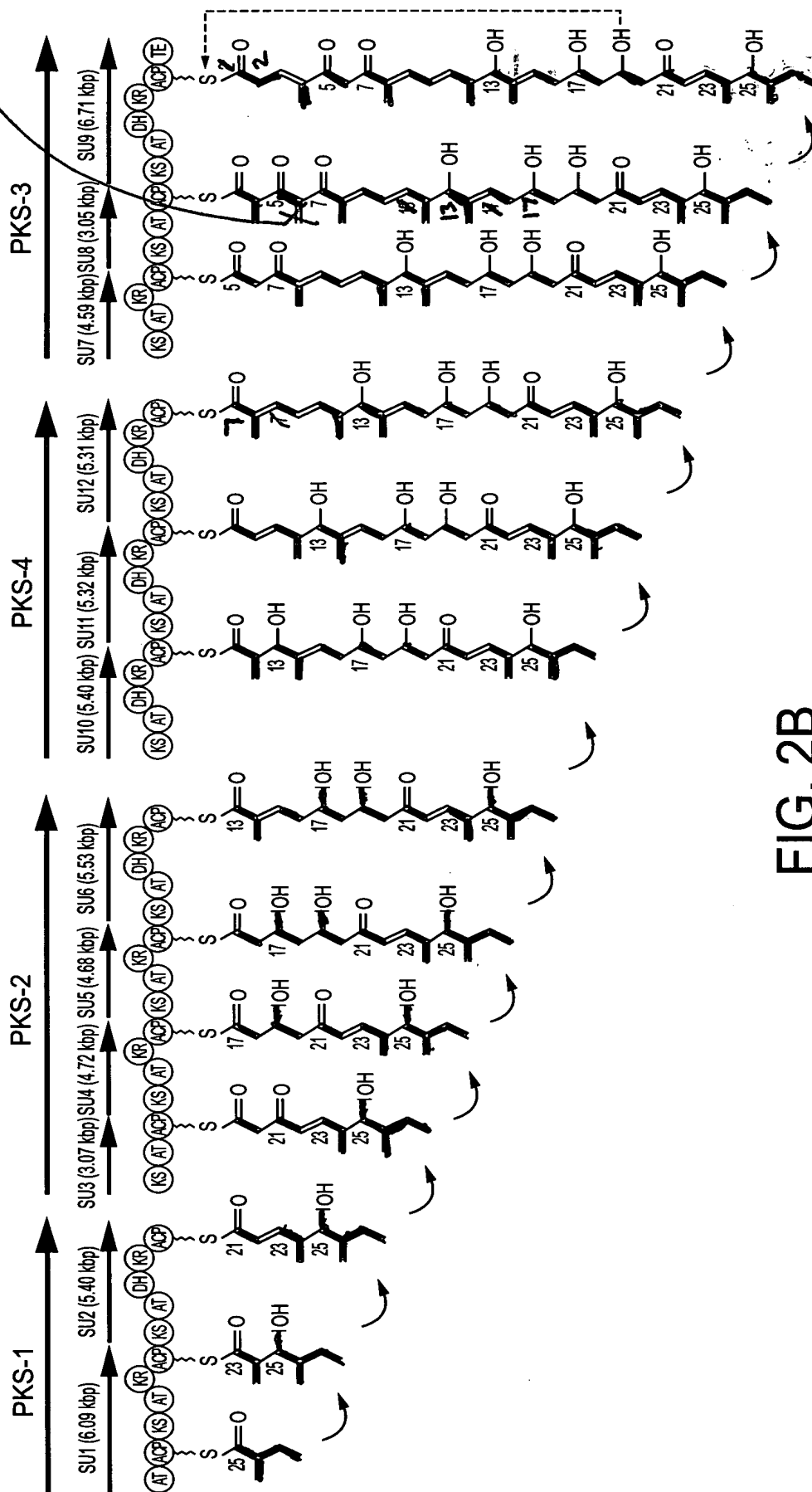


FIG. 2B